Activity: Construction Planning

Activity Summary

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Program Components	FY 2005 Enacted	FY 2006 Estimate	Fixed Costs & Related Changes	Program Changes (+/-)	Budget Request	Change From 2006 (+/-)
Construction Planning	20,925	19,632	+17	0	19,649	+17
Total Requirements	20,925	19,632	+17	0	19,649	+17
Total FTE Requirements	9	9	0	0	9	0

Mission Overview

Construction Planning contributes to the National Park Service's mission, and the Department of the Interior's mission in two primary mission goal areas: 1) Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context, and 2) Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriation recreational opportunities. The Construction Planning program also supports Department of the Interior goals PEO 1 (Resource Protection) Improve Health of Watersheds, Landscapes and Marine Resource; PEO 3 (Resource Protection) Protect Cultural and Natural Resources; and REO 1 (Recreation) Provide for quality recreation experience.

Activity Overview

The Construction Planning activity accomplishes special technical investigations, surveys, and comprehensive design necessary for preliminary planning, and to ensure that initial phases of the development planning process allows for the proper scheduling, and information gathering, to successfully complete construction projects. Funds are used to acquire archeological, historical, environmental, and engineering information and prepare comprehensive designs, working drawings, and specification documents needed to construct or rehabilitate facilities in areas throughout the National Park System.

Justification of 2007 Program Changes

The 2007 budget request for Construction Planning is \$19.649 million, with no program changes for FY 2007.

FY 2007 Program Overview and Planned Performance

As one of the key activities of major construction projects for the National Park Service, construction planning serves to lay the groundwork for actual construction with design, budgeting, condition surveys, and other services. This allows for more efficient and effective execution of the construction phase of work. Planning further serves to provide for the best possible visitor experience by adequately providing for sound, safe, and appropriate infrastructure.

This activity consists of the resources needed for a two-step planning process to assure the satisfactory completion of large construction projects. The first step consists of pre-design and supplementary services that need to be completed before final design starts and construction documents are completed. These typically include project programming and budgeting, resources analysis, existing condition surveys, site analysis, geotechnical engineering, utilities studies, and surveys. Supplementary services and environmental reporting are tasks that are usually completed concurrently with pre-design activities. These typically include natural, cultural and archeological investigations, special consultations, fire security, safety, ergonomics, rendering, modeling, special graphic services, life-cycle cost analysis, value analysis studies, energy studies, resources compliance studies, hazardous materials surveys, detailed cost estimating, monitoring, and testing and mitigation. Compliance documents underway concurrently with pre-design documents are funded separately. Pre-design includes presentation of a recommended design concept to the Servicewide Development Advisory Board.

The second process is project design. Project design includes the preparation of preliminary and final architectural, landscape and engineering drawings and specifications necessary for the construction of utilities, roads and structures. Under this activity final construction drawings and specifications are prepared and final cost estimates and contract-bidding documents are developed. Without completion of these tasks, actual construction awards could never be made. Architectural/engineering contractors will accomplish almost all of the project design activity. The funding level requested will enable the Service to keep pace with the large line item construction program backlog of non-road reconstruction and replacement projects on the recently revised Servicewide Five-Year Deferred Maintenance and Capital Improvement Plan.

Construction planning criteria can change from year to year, but generally, priority consideration is normally given in the following order based on:

- 1. Planning and design for previously appropriated line item construction projects.
- 2. Planning and design for line item construction projects appropriated in the current fiscal year.
- 3. Planning and design for Congressionally added and funded projects in the current fiscal year.
- 4. Projects or phased components of projects of the National Park Service's 5-year Construction Program scheduled and approved for funding by the Service's Development Advisory Board (DAB) within the next two fiscal years.
- 5. Planning and design needs for projects funded in other construction program activities.

The NPS will continue its efforts to prepare capital asset plans for major construction projects, consistent with OMB Circular A-11 and the Federal Acquisition Streamlining Act. These plans identify the cost, schedule, and performance goals of proposed projects and then track the project's progress in meeting those goals.

In conformance with Congressional language contained in the reports accompanying the FY 2004 appropriation, included below is a list of projects estimated at over \$5.0 million contained in the approved 5-Year Deferred Maintenance and Capital Improvement Plan that represent new planning starts for FY 2007.

<u>PARK</u>	PROJECT DESCRIPTION	RGN	STATE	<u>FY</u>	\$000 ¹
Denali NP&Pres	Replace Emergency Services and Law Enforcement Facilities	AK	AK	2010	5,132
Channel Islands NP	Replace Failing Pier, Primary Access to Santa Rosa Island	PW	CA	2008	5,669
Gateway NRA	Replace Primary Electrical Cables on Floyd Bennett Field	NE	NY	2009	6,058
Mammoth Cave NP	Rehab Lantern Tour Routes	SE	KY	2011	10,919
Yellowstone NP	Replace Fishing Bridge Water System	IM	WY	2010	5,774

Amounts shown are for estimated costs of the construction projects, not the planning costs.

FY 2006 Planned Performance

<u>Performance on NPS strategic goals</u>: FY 2006 project descriptions contain Facility Condition Index information and annual operating costs where this information is available. Construction planning funds will be used to complete design development that meet the stated NPS goals identified in the original Project Information Management System entry as follows:

- Goal PEO 1 Resource protection, when the original scope of work includes reference to Resource Protection goals such as goals 1a1C, 1a1D, 1a1E, 1a1F, 1a4A, Construction Planning funds will be used to produce preliminary design and construction documents to meet the goals stated in the project description. Accomplishment of resource goals will be measured at the completion of construction and reported at the park level.
- Goal PEO 3 Resource protection, when the original scope of work includes reference to Resource Protection goals such as goals 1a5A, 1a5 and 1a7, Construction Planning funds will be used to produce preliminary design and construction documents to meet the goals stated in the project

description. Accomplishment of these resource goals will be measured at the completion of construction and reported at the park level.

 Goal REO 1 – Recreation, when to original scope of work includes references to improving Recreation and Visitor Services goals such as goals 11a8, Accessibility, and RIM.1.04.001 Facility Condition, preliminary design and construction documents will meet 100% of the accessibility requirements and Facility Condition Index improvements stated in the original scope of work. Accomplishment of these Recreation goals will be measured at the completion of construction and reported at the park level.

Effective Completion of Design Development:

The FY 2006 goal for expending Construction Planning funding for each phase of design development is:

- Pre-design development is complete for each project prior to the project being submitted as part of the NPS Line-Item Construction and Maintenance Program budget submission.
- Design development is complete for 70% of projects no later than the 1st quarter of the year of construction and 100% of projects have completed design development by 3rd quarter of the year of construction.
- Cost estimates are reviewed and updated for 100% of projects just prior to construction bidding.
 Projects are generally comprised of a base bid component at approximately 95% of available funding
 and the remaining 5% is identified as bid options. Bid options do not impact the core scope of work
 identified for the project. However, they do allow for bid awards that can react to fluctuations of local
 construction markets.

Value Analysis:

100% of all major construction projects in pre-design development and having a net construction value of \$1.0 million or greater completed a value analysis evaluation prior to review by the NPS Development Advisory Board.

FY 2005 Program Performance Accomplishments

<u>Performance on NPS strategic goal:</u> Beginning in FY 2005 project descriptions contained Facility Condition Index Information, where this information is available. Construction Planning funds were used to complete design development that meets the stated NPS goals identified in the original Project Information Management System entry as follows:

- Goal PEO 1 Resource protection, when the original scope of work includes reference to Resource Protection goals such as goals 1a1C, 1a1D, 1a1E, 1a1F, 1a4A, Construction Planning funds will be used to produces preliminary design and construction documents to meet the goals stated in the project description. Accomplishment of resource goals will be measured at the completion of construction and reported at the park level.
- Goal PEO 3 Resource protection, when the original scope of work includes reference to Resource Protection goals such as goals 1a5A, 1a5 and 1a7, Construction Planning funds will be used to produce preliminary design and construction documents to meet the goals stated in the project description. Accomplishment of these resource goals will be measured at the completion of construction and reported at the park level.
- Goal REO 1 Recreation, when to original scope of work includes references to improving Recreation and Visitor Services goals such as goals IIa8, Accessibility, and RIM.1.04.001 Facility Condition, preliminary design and construction documents will meet the 100% of the accessibility requirements and Facility Condition Index improvements stated in the original scope of work. Accomplishment of these Recreation goals will be measured at the completion of construction and reported at the park level.

Effective completion of design development:

The FY 2005 goal for expending Construction Planning funding for each phase of design development was:

- Pre-design was complete for approximately 96% of projects submitted as part of the Line Item Construction and Maintenance Program.
- Design development was completed on approximately 84% of projects by the 3rd quarter. Because of fluctuations in construction markets, approximately 16% of projects are under redesign consideration to stay within available funds.

Value Analysis:

100% of all major construction projects in pre-design development and having a net construction value of \$1.0 million or greater will have completed a value analysis evaluation prior to review by the NPS Development Advisory Board.